Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Seiji Asaoka et al. Serial No: 10/049,357 Filing Date: May 22, 2002 Title: COSMETIC CONTAINING AMPHOTERIC POLYURETHANES	Docket No: SPG 6583 P1US Examiner: Kara Renita McMillian Group Art Unit: 1627 Confirmation Number: 9914

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF ON APPEAL

Appellant hereby submits this Reply Brief in accordance with 37 C.F.R. § 41.41(a)(1), in response to the Examiner's Answer mailed September 17, 2009 and the supplemental Office Action mailed October 16, 2009. The honorable Board is respectfully requested to reverse the rejections for the reasons set forth herein.

Respectfully submitted,

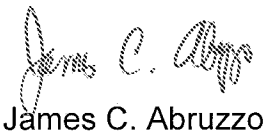

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TABLE OF CONTENTS

I. STATUS OF THE CLAIMS

Claims 10-14, 16, 17, 19 and 20 are currently pending, with claims 1-9, 15 and 18 having been canceled. All pending claims, namely claims 10-14, 16, 17, 19 and 20, stand finally rejected and are appealed.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on Appeal are summarized as follows:

Whether claims 10-15, 17 and 20 are unpatentable under 35 U.S.C. § 103(a) as obvious over U.S. Patent Application Publication No. 2002/0071811 ("Bhatt") in view of U.S. Patent No. 6,335,003 ("Kim").

Whether claims 11-13, 16 and 19 are unpatentable under 35 U.S.C. § 103(a) as obvious over Bhatt in view of Kim as applied to claims 10-15, 17 and 20, and further in view of U.S. Patent No. 5,972,354 ("de la Poterie") in view of U.S. Patent No. 5,100,658 ("Bolich, Jr.").

III. ARGUMENT

As set forth in the final Official Action dated March 25, 2008, the Office rejects claims 10-15, 17 and 20 as unpatentable under 35 U.S.C. § 103(a) as obvious over U.S. Patent Application Publication No. 2002/0071811 ("Bhatt") in view of U.S. Patent No. 6,335,003 ("Kim"). The Office also rejects claims 11-13, 16 and 19 as unpatentable under 35 U.S.C. § 103(a) as obvious over Bhatt in view of Kim as applied to claims 10-15, 17 and 20, and further in view of U.S. Patent No. 5,972,354 ("de la Poterie") in view of U.S. Patent No. 5,100,658 ("Bolich, Jr.").

In response to the Examiner's Answer mailed August 28, 2009, Appellants provide the following additional distinguishing commentary, which is believed to address the Office's comments and place the present case in condition for allowance. Reversal and withdrawal of the final rejection of all of the pending claims is respectfully requested.

At page 8 of the Examiner's Answer, the Office maintains that "a polyether polyol as claimed in the instant application is rendered obvious in view of an alkylene glycol as disclosed in Bhatt et al." In establishing this alleged obviousness, the Office asserts that

> [p]olyols are compounds with multiple hydroxyl functional groups available for organic reactions. A molecule with two hydroxyl groups is a diol, one with three is a triol, one with four is a tetrol and so on. Alkylene glycol is a diol having two hydroxyl functional groups and is known as a monomeric polyol. Thus since alkylene glycol is a polyol with a similar structure as polyether polyol, alkylene glycol is rendered obvious. (Examiner's Answer, page 8).

Appellants submit, however, that while the Office has allegedly established by its explanation that alkylene glycol is a monomeric polyol, Appellants submit that the Office has yet to establish why a monomeric polyol would render obvious a polymeric polyol, and in particular the polyether polyol as recited in Appellants' claim 10. Appellants submit that the Office merely concludes that "since alkylene glycol is a polyol with a similar structure as polyether polyol" alkylene glycol renders obvious polyether polyol.

However, Appellants submit that based on the Office's rationale, all polyols would have been rendered obvious by the mere disclosure of another polyol. In other words, the Office appears to be alleging that all polyols have allegedly similar structures such that the disclosure of one polyol would render obvious all polyols. Appellants respectfully submit, however, without more such a general assertion extends the teaching of Bhatt beyond what they would have fairly disclosed to one of ordinary skill in the art. Hence, Appellants submit that the Office has not met its burden of establishing why a polymeric polyol, and in particular polyether polyol, would have been obvious based on the disclosure of a specific monomeric polyol, namely alkylene glycol, as disclosed in Bhatt.

Furthermore, the Appellants submit that claim 10 recites that "the amphoteric resin is formed from the reaction of a polyol chosen from polyester polyol and/or polyether polyol, a polyisocyanate, a compound having active hydrogen(s) and carboxyl group(s), and a compound having active hydrogen(s) and tertiary amino group(s)." Accordingly, as recited in claim 10, the amphoteric resin must be formed from the reaction including the polyol. Appellants submit that in determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. M.P.E.P. § 2141.02 (citing *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983)). Appellants submit that not only must the Office establish that the polyol of Bhatt renders obvious Appellants claimed polyol, but the Office must also establish that the polyol would form the amphoteric resin when reacted with the other reactants recited in claim 10. Appellants submit that in this regard, the Office's rejection is also deficient. Thus, Appellants submit that the Office has also failed to render claim 10 as a whole obvious based on its mere conclusion that alkylene glycol is a polyol "with a similar structure as polyether polyol."

In regard to the Office's assertion that the diamines of Bhatt are interchangeable with tertiary amines, based on the disclosure of Kim, Appellants maintain that neither Bhatt nor Kim discloses or suggests the use of polyols in forming the presently claimed

amphoteric urethane resins, as argued in Appellants previous response. Moreover, even accepting the Office's arguments (which Appellants do not) that the diamines and tertiary amines are allegedly interchangeable, Appellants submit that there is no evidence in either Bhatt, Kim or presented by the Office that the substitution of the tertiary amines of Kim would react with the isocyanates of Bhatt to arrive at Appellants' amphoteric urethane resin. That is, the diamines and tertiary amines may be interchangeable in certain circumstances, Appellants submit, as argued in Appellants' Appeal Brief, that one of ordinary skill in the art would not have substituted the tertiary amines of Kim for the carboxylic acid groups of Bhatt for purposes of Appellants' invention, because the tertiary amines of Kim would not be reactive with the isocyanates of Bhatt, as the primary and secondary amine groups are. Rather, the tertiary amine groups would instead act as cationic substituents, i.e. they would, if they would be substituted at all, be substitutable with the carboxylic acid/carboxylate groups of Bhatt, thus rendering Bhatt cationic. In contrast, the tertiary amino groups as included in the composition claimed by Appellant are reactive substituents that ionically bond with the carboxyl group(s) thus rendering the claimed urethane resin amphoteric. In other words, to obtain an amphoteric urethane resin as claimed by Appellants, one of ordinary skill in the art would not be able to merely substitute the tertiary amine groups of Kim for primary or secondary groups of Bhatt. This is because, contrary to the Office's allegation the two amine groups are not interchangeable for purposes of Appellants' invention so as to ultimately arrive at Appellants' claimed invention. For at least these reasons, Appellants submit that the Office's rejection of independent claim 10 should be reversed and withdrawn.

At page 10 of the Examiner's Answer, the Office asserts that "Appellants further argue that neither Bhatt nor Kim et al. teach the amphoteric urethane resin and a water soluble resin." To clarify, Appellants submit that neither Bhatt nor Kim disclose or suggest the claimed amphoteric urethane resin and that where Bhatt discloses water soluble ingredients, Bhatt discloses a number of optional ingredients including a large number of those that are not water soluble. Appellants submit that one of ordinary skill in the art, absent impermissible hindsight, would not have selected the particular resin

and water soluble resin from among the list of optional ingredients to arrive at Appellants' invention.

Appellants appreciate the Office's correction that certain identified optional ingredients can be water soluble. However, this does not refute Appellants' argument that the list of optional ingredients contains a number of non-water soluble resins and those that are not resins at all. The basis of Appellants' argument remains, therefore, that the Office's rejection appears to be based on that "the modifications of the prior art to meet the claimed invention would have been 'well within the ordinary skill of the art at the time the claimed invention was made' because the references relied upon teach that all aspects of the claimed invention were individually known in the art. . . ." Appellants submit that this "is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references." (emphasis added). (See *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993)). Here, there are a number of non-water soluble polymers, water-soluble but non-polymer materials, and many materials that are not resins from which one of ordinary skill in the art could have selected. Accordingly, Appellants submit that only through Appellants' application, used as a roadmap, has the Office been able to pick and choose only those features of Bhatt that are necessary to allegedly render the invention obvious, to the exclusion of the other litany of conventional optional ingredients disclosed, where Bhatt does not provide any guidance for choosing certain optional components over others. Appellants submit that it is improper for the Office to rely on improper hindsight to render obvious Appellants' invention.

Regarding the Office's comment with respect to Bolich Jr., Appellants submit that ["a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. M.P.E.P. § 2141.02 (citing *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984)). Accordingly, Appellants submit the Office's argument "said reference was only relied upon to teach that silicone resins are known in the art for their hair conditioning properties . . . ." improperly removes said teaching from the context of the prior art reference rather than providing that the reference be considered as a whole, in its entirety. Accordingly, Appellants submit that the Office's

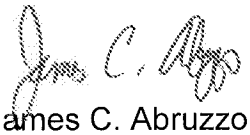
rationale runs counter to the Federal Circuit's mandate as to how prior art references should be utilized and interpreted.

For all of the above reasons, Appellants submit that the currently pending rejections of independent claim 10, and its dependent claims 11-14, 16, 17, 19 and 20, are improper and should be reversed and withdrawn.

IV. CONCLUSION

In view of the arguments presented herein Appellant respectfully submits that the appealed claims stand improperly rejected. The rejection of the appealed claims of record should be reversed with instructions to allow these claims over the cited references. Such action is hereby respectfully requested.

Respectfully submitted,



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